

DRAFT Approach for Wetland and Riparian Area Mapping and Condition Assessment of Central Valley Projects Managed by the Department of Water Resources

Overall Scope and Objectives

Assist DWR with wetland and riparian area monitoring and assessment efforts for both the BDCP alignment options (BDCP) and the Central Valley Flood Management Planning (CVFMP) Program in a manner consistent with the California Water Quality Monitoring Council's adopted approaches as outlined in the Wetland and Riparian Area Monitoring Program (WRAMP). Specific objectives include assisting DWR with:

- wetland and riparian area mapping;
- remotely-sensed condition assessments using the CA Rapid Assessment Method (CRAM);
- on-the-ground rapid assessments of representative habitats for comparative purposes; and
- training of DWR or other staff as necessary in mapping and monitoring methods.

Work will be performed in a manner consistent with the three-level framework adopted by the Monitoring Council and the CA Wetland Monitoring Workgroup. The benefits of this will be:

- All products readily adaptable to both state and federal standards.
- Maps can be shared through the state's data centers with other agencies.
- Protocols and classification of aquatic habitats will be consistent with existing and emerging policies and procedures (e.g., the State Water Resources Control Board's policy on Wetland and Riparian Areas).
- Products will assist DWR and other partner agencies with relevant permit review and approval processes.
- DWR and other staff can be trained in these methods and approaches for future applications.

Specific Tasks

1. Work with DWR's BDCP and CVFMP groups to train staff in implementing CRAM and the L1-based mapping and classification procedures. This is fundamentally a training and liaison task, the kind of work that SCCWRP, the Central Coast Wetlands Group, and SFEI have all been engaged in with other regional projects or teams.
2. Develop project-based wetland and riparian mapping for BDCP impact assessment and mitigation evaluation and approval processes.
 - A. Obtain existing maps and data for the three (or four) alternative alignments. Working with DWR and DFG staff, categorize wetlands (nominally based on VegCAMP data) and cross-walk them into a classification consistent with CRAM so that appropriate modules can be assigned.
 - B. Develop final maps with appropriate classification schemes as needed by DWR.
3. Working with DWR and DFG staff, identify accessible wetlands in the vicinity of the Delta that have the same VegCAMP classifications as those in the BDCP optional alignments and

in the CVFMP impact areas. To the extent necessary, field-verify the applicability of the CRAM modules, and (with the concordance of the L2 Committee) modify the modules if appropriate.

- A. Develop an approach for running CRAM assessments on selected sites in each alignment option to be completed to the extent possible using “office assessments” procedures in the CRAM manual. This information will be used along with other remotely sensed data to develop a report of condition of the various aquatic resource types in the project area.
 - B. Develop a sampling process for the accessible locations and conduct CRAM field sampling. Compile/summarize the results as an indication of the conditions that would be affected by the proposed alignments.
 - C. When an alignment has been selected and access to the alignment is available, develop a CRAM sampling plan for the alignment and perform field condition assessments for the alignment, modifying interpretations as necessary.
4. Assist DWR in developing wetland and riparian mapping and condition information for the BDCP for use in NEPA, CEQA and CWA approval processes (condition assessments, impact analyses, and compensatory mitigation evaluations).
 5. Recommend monitoring program elements that will document the establishment and success of mitigation proposed to offset project effects, based on the elements of WRAMP.
 6. Ensure that data are delivered (or able to be transferred) to the Delta Regional Monitoring Program (Delta RMP). This will involve early consultation with this nascent entity to provide guidance on mapping protocols and standards, wetland classification, and other monitoring procedures currently used and managed by SFEI, SCCWRP, and MLML for their respective programs.

Technical Assistance Partners

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